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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,926	12/30/2005	Masataka Kira	126514	3681

25944 7590 06/10/2010

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EXAMINER	
RUSH, ERIC	

ART UNIT	PAPER NUMBER
2624	

NOTIFICATION DATE	DELIVERY MODE
06/10/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/562,926	KIRA, MASATAKA	
	Examiner	Art Unit	
	ERIC RUSH	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 March 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2 and 4-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2 and 4-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 December 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 26 March 2010 has been entered.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 22 and 23 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 22 and 23 are drawn to functional descriptive material on a computer-readable medium. Normally, the claim would be statutory. However, the specification, on page 7 paragraph 0015 and page 51 - 52 paragraphs 0120 - 0122, fail to explicitly confine a *computer readable medium* to any specific medium. During patent examination the pending claims must be interpreted as broadly as their terms reasonably allow, the broadest reasonable interpretation of a claim drawn to a computer readable medium typically covers forms of non-transitory tangible media and transitory

propagating signals, particularly when the specification is silent. Because the full scope of the claim as properly read in light of the disclosure encompasses non-statutory subject matter, the claim as a whole is non-statutory. The Examiner suggest amending the claim to *include* the disclosed tangible computer readable media, while at the same time *excluding* the intangible media such as internet transmissions, signals, carrier waves, etc… For example, "A *non-transitory* computer readable medium…". Any amendment to the claim should be commensurate with its corresponding disclosure.

The Examiner also directs the Applicant's attention to the Official Gazette of the United States Patent and Trademark Office dated February 23, 2010 Volume 1351 Number 4 page 212.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. The rejections to claims 1, 2 and 4 – 25 as being rejected under 35 U.S.C. 112, second paragraph, as being indefinite are hereby withdrawn in view of the amendments and remarks received 26 March 2010.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1, 16, 18, 20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wood U.S. Patent No. 6,023,263 in view of Morimura et al. U.S. Patent No. 6,215,899.

- With regard to claim 1, Woods teaches a method for generating a stereoscopic image set of images having a left image and a right image for stereoscopic vision by a stereoscopic image generating apparatus, (Wood, Fig. 1, Abstract, Column 2 Line 58 – Column 3 Line 20) said method comprising: a region extraction step of extracting left and right target regions which do not include a pair of fused points corresponding to each other in the left image and the right image; (Wood, Figs. 2 & 3 Elements G and G', Column 3 Line 57 – column 4 Line 40 [G and G' are locations within the image

which do not include pairs of fused points between the left and right image.]) and a region processing step of carrying out processing of generating the stereoscopic image set of images so as to make the region identified in the region extraction step even more inconspicuous than the remaining regions of the target regions. (Wood, Column 4 Lines 3 – 41 [Wood teaches post-processing using nearest occluded pixel information, a z-buffer for the nearest visible pixels and for the nearest occluded pixels, to fill in the gaps so as to make the processed region less noticeable, more inconspicuous. Furthermore, the Examiner asserts that Wood teaches processing only one of the left and right target regions to make the regions more inconspicuous.]) Wood teaches identifying a gap in one of the left or right images (taken to be the more inconspicuous region since nothing is present as opposed to something) and processing the gap so that it becomes unobtrusive, i.e. more inconspicuous. (Wood, Column 4 Lines 3 – 40 [The nearest occluded pixel information is substituted to fill the gaps so they are highly correlated to the remainder of the image.]) However, Wood fails to explicitly teach identifying a more inconspicuous region between the left and right target regions. Pertaining to analogous art, Morimura et al. teach identifying a more inconspicuous region between the left and right target regions. (Morimura et al., Column 19 Lines 22 – 51 and Column 20 Lines 22

- 55) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Wood to include the teachings of Morimura et al. This modification would have been prompted in order to improve the base device of Wood with the teachings of Morimura et al. The teachings of Morimura et al. to identify the region which is in need of processing would enhance the base device of Wood in the same way it improves the device of Morimura et al. in that the region requiring processing to improve the synthetic image would only be applied to the recognized one region in one image exemplifying occluded data. This combination could be completed according to well known techniques in the art and would likely yield predictable results, in that the inconspicuous region would be identified and processed in one image thereby enhancing the regions in both images of Wood.

- With regards to claim 16, Wood teaches a stereoscopic image generating apparatus for generating a stereoscopic image set of images having a left image and a right image for stereoscopic vision, (Wood, Fig. 1, Abstract, Column 2 Line 58 – Column 3 Line 20) said stereoscopic image generating apparatus comprising: region extraction means of extracting left and right target regions which do not include a pair of fused points corresponding to each other in the left image and the right image; (Wood, Figs. 2 & 3

Elements G and G', Column 3 Line 57 – column 4 Line 40 [G and G' are locations within the image which do not include pairs of fused points between the left and right image.]) and a region processing means for carrying out processing of generating the stereoscopic image set of images so as to make the region identified in the region extraction step even more inconspicuous than the remaining regions of the target regions. (Wood, Column 4 Lines 3 – 41 [Wood teaches post-processing using nearest occluded pixel information, a z-buffer for the nearest visible pixels and for the nearest occluded pixels, to fill in the gaps so as to make the processed region less noticeable, more inconspicuous. Furthermore, the Examiner asserts that Wood teaches processing only one of the left and right target regions to make the regions more inconspicuous.]) Wood teaches identifying a gap in one of the left or right images (taken to be the more inconspicuous region since nothing is present as opposed to something) and processing the gap so that it becomes unobtrusive, i.e. more inconspicuous. (Wood, Column 4 Lines 3 – 40 [The nearest occluded pixel information is substituted to fill the gaps so they are highly correlated to the remainder of the image.]) However, Wood fails to explicitly teach identifying a more inconspicuous region between the left and right target regions. Pertaining to analogous art, Morimura et al. teach identifying a more inconspicuous region

between the left and right target regions. (Morimura et al., Column 19 Lines 22 – 51 and Column 20 Lines 22 - 55) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Wood to include the teachings of Morimura et al. This modification would have been prompted in order to improve the base device of Wood with the teachings of Morimura et al. The teachings of Morimura et al. to identify the region which is in need of processing would enhance the base device of Wood in the same way it improves the device of Morimura et al. in that the region requiring processing to improve the synthetic image would only be applied to the recognized one region in one image exemplifying occluded data. This combination could be completed according to well known techniques in the art and would likely yield predictable results, in that the inconspicuous region would be identified and processed in one image thereby enhancing the regions in both images of Wood.

- With regards to claim 18, Wood teaches a stereoscopic viewing method of watching a stereoscopic image set of images having a left image and a right image for stereoscopic vision by stereoscopic image generating apparatus, (Wood, Fig. 1, Abstract, Column 2 Line 58 – Column 3 Line 20) said stereoscopic viewing method comprising: a region extraction step of extracting left and right

target regions which do not include a pair of fused points corresponding to each other in the left image and the right image; (Wood, Figs. 2 & 3 Elements G and G', Column 3 Line 57 – column 4 Line 40 [G and G' are locations within the image which do not include pairs of fused points between the left and right image.]) and a region processing step of carrying out processing of generating the stereoscopic image set of images so as to make region identified in the region extraction step even more inconspicuous than the remaining regions of the target regions. (Wood, Column 4 Lines 3 – 41 [Wood teaches post-processing using nearest occluded pixel information, a z-buffer for the nearest visible pixels and for the nearest occluded pixels, to fill in the gaps so as to make the processed region less noticeable, more inconspicuous. Furthermore, the Examiner asserts that Wood teaches processing only one of the left and right target regions to make the regions more inconspicuous.]) Wood teaches identifying a gap in one of the left or right images (taken to be the more inconspicuous region since nothing is present as opposed to something) and processing the gap so that it becomes unobtrusive, i.e. more inconspicuous. (Wood, Column 4 Lines 3 – 40 [The nearest occluded pixel information is substituted to fill the gaps so they are highly correlated to the remainder of the image.]) However, Wood fails to explicitly teach identifying a more inconspicuous region between

the left and right target regions. Pertaining to analogous art, Morimura et al. teach identifying a more inconspicuous region between the left and right target regions. (Morimura et al., Column 19 Lines 22 – 51 and Column 20 Lines 22 - 55) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Wood to include the teachings of Morimura et al. This modification would have been prompted in order to improve the base device of Wood with the teachings of Morimura et al. The teachings of Morimura et al. to identify the region which is in need of processing would enhance the base device of Wood in the same way it improves the device of Morimura et al. in that the region requiring processing to improve the synthetic image would only be applied to the recognized one region in one image exemplifying occluded data. This combination could be completed according to well known techniques in the art and would likely yield predictable results, in that the inconspicuous region would be identified and processed in one image thereby enhancing the regions in both images of Wood.

- With regards to claim 20, Wood teaches a stereoscopic viewing apparatus for showing a stereoscopic image set of images having a left image and a right image for stereoscopic vision, (Wood, Fig. 1, Abstract, Column 2 Line 58 – Column 3 Line 20) said stereoscopic

viewing apparatus comprising: region extraction means of extracting left and right target regions which do not include a pair of fused points corresponding to each other in the left image and the right image; (Wood, Figs. 2 & 3 Elements G and G', Column 3 Line 57 – column 4 Line 40 [G and G' are locations within the image which do not include pairs of fused points between the left and right image.]) and a region processing means for carrying out processing of generating the stereoscopic image set of images so as to make the region identified in the region extraction step even more inconspicuous than the remaining regions of the target regions. (Wood, Column 4 Lines 3 – 41 [Wood teaches post-processing using nearest occluded pixel information, a z-buffer for the nearest visible pixels and for the nearest occluded pixels, to fill in the gaps so as to make the processed region less noticeable, more inconspicuous. Furthermore, the Examiner asserts that Wood teaches processing only one of the left and right target regions to make the regions more inconspicuous.]) Wood teaches identifying a gap in one of the left or right images (taken to be the more inconspicuous region since nothing is present as opposed to something) and processing the gap so that it becomes unobtrusive, i.e. more inconspicuous. (Wood, Column 4 Lines 3 – 40 [The nearest occluded pixel information is substituted to fill the gaps so they are highly correlated to the remainder of the image.]) However,

Wood fails to explicitly teach identifying a more inconspicuous region between the left and right target regions. Pertaining to analogous art, Morimura et al. teach identifying a more inconspicuous region between the left and right target regions. (Morimura et al., Column 19 Lines 22 – 51 and Column 20 Lines 22 - 55) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Wood to include the teachings of Morimura et al. This modification would have been prompted in order to improve the base device of Wood with the teachings of Morimura et al. The teachings of Morimura et al. to identify the region which is in need of processing would enhance the base device of Wood in the same way it improves the device of Morimura et al. in that the region requiring processing to improve the synthetic image would only be applied to the recognized one region in one image exemplifying occluded data. This combination could be completed according to well known techniques in the art and would likely yield predictable results, in that the inconspicuous region would be identified and processed in one image thereby enhancing the regions in both images of Wood.

- With regards to claim 22, Wood teaches a computer readable medium storing a program for controlling a apparatus for generating a stereoscopic image set of images having a left image and a right

image for stereoscopic vision, (Wood, Column 4 Line 62 - Column 5 Line 41) said program causing a stereoscopic image generating apparatus to execute: a region extraction step of extracting left and right target regions which do not include a pair of fused points corresponding to each other in the left image and the right image; (Wood, Figs. 2 & 3 Elements G and G', Column 3 Line 57 – column 4 Line 40 [G and G' are locations within the image which do not include pairs of fused points between the left and right image.]) and a region processing step of carrying out processing of generating the stereoscopic image set of images so as to make the region identified in the region extraction step even more inconspicuous than the remaining regions of the target regions. (Wood, Column 4 Lines 3 – 41 [Wood teaches post-processing using nearest occluded pixel information, a z-buffer for the nearest visible pixels and for the nearest occluded pixels, to fill in the gaps so as to make the processed region less noticeable, more inconspicuous. Furthermore, the Examiner asserts that Wood teaches processing only one of the left and right target regions to make the regions more inconspicuous.]) Wood teaches identifying a gap in one of the left or right images (taken to be the more inconspicuous region since nothing is present as opposed to something) and processing the gap so that it becomes unobtrusive, i.e. more inconspicuous. (Wood, Column 4 Lines 3 – 40 [The nearest occluded pixel

information is substituted to fill the gaps so they are highly correlated to the remainder of the image.]) However, Wood fails to explicitly teach identifying a more inconspicuous region between the left and right target regions. Pertaining to analogous art, Morimura et al. teach identifying a more inconspicuous region between the left and right target regions. (Morimura et al., Column 19 Lines 22 – 51 and Column 20 Lines 22 - 55) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Wood to include the teachings of Morimura et al. This modification would have been prompted in order to improve the base device of Wood with the teachings of Morimura et al. The teachings of Morimura et al. to identify the region which is in need of processing would enhance the base device of Wood in the same way it improves the device of Morimura et al. in that the region requiring processing to improve the synthetic image would only be applied to the recognized one region in one image exemplifying occluded data. This combination could be completed according to well known techniques in the art and would likely yield predictable results, in that the inconspicuous region would be identified and processed in one image thereby enhancing the regions in both images of Wood.

8. Claims 2, 5, 7, 9, 11, 13, 15, 17, 19, 21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wood U.S. Patent No. 6,023,263 in view of Blake et al. U.S. Publication No. 2005/0232510 A1.

- With regards to claim 2, Wood teaches a method for generating a stereoscopic image set of images having a left image and a right image for stereoscopic vision by a stereoscopic image generating apparatus, (Wood, Fig. 1, Abstract, Column 2 Line 58 - Column 3 Line 20) said method comprising: a region extraction step of extracting left and right regions which do not include fused points corresponding to each other in the left image and the right image; (Wood, Figs. 2 & 3 Elements G and G', Column 3 Line 57 – column 4 Line 40 [G and G' are locations within the image which do not include pairs of fused points between the left and right image.]) and a region processing step of carrying out processing of generating the stereoscopic image set of images so as to make the regions extracted in the region extraction step even more inconspicuous than the remaining regions of the regions. (Wood, Column 4 Lines 3 – 41 [Wood teaches post-processing using nearest occluded pixel information, a z-buffer for the nearest visible pixels and for the nearest occluded pixels, to fill in the gaps so as to make the processed region less noticeable, more inconspicuous. Furthermore, the Examiner asserts that Wood teaches processing

only one of the left and right target regions to make the regions more unobtrusive, i.e. inconspicuous.]) Wood fails to teach a region extraction step of extracting left and right regions which are displayed on a display plane. Pertaining to analogous art, Blake et al. teach a region extraction step of extracting left and right regions which are displayed on a display plane. (Blake et al. Figs. 6 & 7, Page 2 Paragraphs 0025 – 0026 and Page 3 Paragraphs 0035 – 0041) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Wood with the teachings of Blake et al. This modification would have been prompted in order to provide a user with information regarding which picture elements are processed picture elements as opposed to original picture elements. This combination could have been completed using well known techniques and would likely yield predictable results, in that the regions extracted by Wood that fail to have a pair of fused points between a left and right image, and therefor require post-processing, would be displayed to a user.

- With regards to claim 5, Wood in view of Blake et al. teach the generating method as claimed in claim 2. Wood fails to teach wherein the processing of generating the stereoscopic image set of images is a processing of blurring the region identified in the region extraction step. Pertaining to analogous art, Blake et al. teach

wherein the processing of generating the stereoscopic image set of images is a processing of blurring the region identified in the region extraction step. (Blake et al., Page 3 Paragraphs 0039 – 0041, [a low-pass smoothing operation is performed on the disparity patch which includes blur.]) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined teachings of Wood in view of Blake et al. with further teachings of Blake et al. This modification would have been prompted in order to save memory by no longer needing to store the z-buffered information as used by Wood for making the removed region more inconspicuous. This combination could have been completed using well known techniques and would likely yield predictable results, in that z-buffer information would no longer need to be stored for making the processed regions more inconspicuous.

- With regards to claim 7, Wood in view of Blake et al. teach the method as claimed in claim 2. Wood fails to teach wherein the processing generating the stereoscopic image set of images is a processing of reducing contrast of the region identified in the region extraction step. Pertaining to analogous art, Blake et al. teach wherein the processing generating the stereoscopic image set of images is a processing of reducing contrast of the region identified in the region extraction step. (Blake et al., Page 3 Paragraphs 0039

– 0041, [a low-pass smoothing operation is performed on the disparity patch which would induce a contrast reduction.]) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined teachings of Wood in view of Blake et al. with further teachings of Blake et al. This modification would have been prompted in order to save memory by no longer needing to store the z-buffered information as used by Wood for making the removed region more inconspicuous. This combination could have been completed using well known techniques and would likely yield predictable results, in that z-buffer information would no longer need to be stored for making the processed regions more inconspicuous.

- With regards to claim 9, Wood in view of Blake et al. teach the method as claimed in claim 2. Wood fails to teach wherein the processing of generating the stereoscopic image set of images is a processing of reducing saturation or brightness of the region identified in the region extraction step. Pertaining to analogous art, Blake et al. teach wherein the processing of generating the stereoscopic image set of images is a processing of reducing saturation or brightness of the region identified in the region extraction step. (Blake et al., Page 4 Paragraph 0053 – Page 5 Paragraph 0058) It would have been obvious to one of ordinary skill

in the art at the time of the invention to modify the combined teachings of Wood in view of Blake et al. with further teachings of Blake et al. This modification would have been prompted in order to save memory by no longer needing to store the z-buffered information as used by Wood for making the removed region more inconspicuous. This combination could have been completed using well known techniques and would likely yield predictable results, in that z-buffer information would no longer need to be stored for making the processed regions more inconspicuous.

- With regards to claim 11, Wood in view of Blake et al. teach the method as claimed in claim 2. Wood fails to teach wherein the processing of generating the stereoscopic image set of images is a processing of bringing a hue of the region identified in the region extraction step close to a cold color family. Pertaining to analogous art, Blake et al. teach wherein the processing of generating the stereoscopic image set of images is a processing of bringing a hue of the region identified in the region extraction step close to a cold color family. (Blake et al., Page 4 Paragraph 0053 – Page 5 Paragraph 0058) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined teachings of Wood in view of Blake et al. with further teachings of Blake et al. This modification would have been prompted in order to

save memory by no longer needing to store the z-buffered information as used by Wood for making the removed region more inconspicuous. This combination could have been completed using well known techniques and would likely yield predictable results, in that z-buffer information would no longer need to be stored for making the processed regions more inconspicuous.

- With regards to claim 13, Wood teaches a stereoscopic image set of images having a left image and a right image for stereoscopic vision, (Wood, Fig. 1, Abstract, Column 2 Line 58 – Column 3 Line 20) the stereoscopic image set of images being processed so as to make a more inconspicuous region between left and right target regions which do not include fused points corresponding to each other in the left image and the right image even more inconspicuous than the remaining regions of the target regions. (Wood, Column 3 Line 57 – Column 4 Line 41 [Wood teaches post-processing using nearest occluded pixel information, a z-buffer for the nearest visible pixels and for the nearest occluded pixels, to fill in the gaps so as to make the processed region less noticeable, more inconspicuous.]) Wood fails to teach left and right target regions which are displayed on a display plane. Pertaining to analogous art, Blake et al. teach left and right target regions which are displayed on a display plane. (Blake et al., Figs. 6 & 7, Page 2

Paragraphs 0025 – 0026 and Page 3 Paragraphs 0035 - 0041) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Wood with the teachings of Blake et al. This modification would have been prompted in order to provide a user with information regarding which picture elements are processed picture elements as opposed to original picture elements. This combination could have been completed using well known techniques and would likely yield predictable results, in that the regions extracted by Wood that fail to have a pair of fused points between a left and right image, and therefor require post-processing, would be displayed to a user.

- With regards to claim 15, Wood in view of Blake et al. teach the method as claimed in claim 2. Wood fails to teach wherein the processing of generating a stereoscopic image set of images is one of or a combination of the following processings: (1) processing of blurring the region identified in the region extraction step; (2) processing of reducing contrast of the region identified in the region extraction step; (3) processing of reducing saturation or brightness of the region identified in the region extraction step; (4) processing of bringing a hue of the region identified in the region extraction step close to a cold color family; and (5) processing of bringing a hue, saturation or brightness of the region identified in the region

extraction step close to a hue, saturation or brightness of the remaining regions of the target regions. Pertaining to analogous art, Blake et al. teach wherein the processing of generating a stereoscopic image set of images is one of or a combination of the following processings: (1) processing of blurring the region identified in the region extraction step; (2) processing of reducing contrast of the region identified in the region extraction step; (3) processing of reducing saturation or brightness of the region identified in the region extraction step; (4) processing of bringing a hue of the region identified in the region extraction step close to a cold color family; and (5) processing of bringing a hue, saturation or brightness of the region identified in the region extraction step close to a hue, saturation or brightness of the remaining regions of the target regions. (Blake et al., Page 3 Paragraphs 0039 – 0041 and Page 4 Paragraph 0053 – Page 5 Paragraph 0058) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined teachings of Wood in view of Blake et al. with further teachings of Blake et al. This modification would have been prompted in order to save memory by no longer needing to store the z-buffered information as used by Wood for making the removed region more inconspicuous. This combination could have been completed using well known techniques and would likely yield predictable results, in that z-buffer information

would no longer need to be stored for making the processed regions more inconspicuous.

- With regards to claim 17, Wood teaches a stereoscopic image generating apparatus for generating a stereoscopic image set of images having a left image and a right image for stereoscopic vision, (Wood, Fig. 1, Abstract, Column 2 Line 58 - Column 3 Line 20) said stereoscopic image generating apparatus comprising: a region extraction means of extracting left and right regions which do not include fused points corresponding to each other in the left image and the right image; (Wood, Figs. 2 & 3 Elements G and G', Column 3 Line 57 – column 4 Line 40 [G and G' are locations within the image which do not include pairs of fused points between the left and right image.]) and a region processing means of carrying out processing of generating the stereoscopic image set of images so as to make the regions extracted in the region extraction step even more inconspicuous than the remaining regions of the regions. (Wood, Column 4 Lines 3 – 41 [Wood teaches post-processing using nearest occluded pixel information, a z-buffer for the nearest visible pixels and for the nearest occluded pixels, to fill in the gaps so as to make the processed region less noticeable, more inconspicuous. Furthermore, the Examiner asserts that Wood teaches processing only one of the left and right target regions to

make the regions more unobtrusive, i.e. inconspicuous.]) Wood fails to teach a region extraction means of extracting left and right regions which are displayed on a display plane. Pertaining to analogous art, Blake et al. teach a region extraction means of extracting left and right regions which are displayed on a display plane. (Blake et al. Figs. 6 & 7, Page 2 Paragraphs 0025 – 0026 and Page 3 Paragraphs 0035 – 0041) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Wood with the teachings of Blake et al. This modification would have been prompted in order to provide a user with information regarding which picture elements are processed picture elements as opposed to original picture elements. This combination could have been completed using well known techniques and would likely yield predictable results, in that the regions extracted by Wood that fail to have a pair of fused points between a left and right image, and therefor require post-processing, would be displayed to a user.

- With regards to claim 19, Wood teaches a method for generating a stereoscopic image set of images having a left image and a right image for stereoscopic vision by a stereoscopic image generating apparatus, (Wood, Fig. 1, Abstract, Column 2 Line 58 - Column 3 Line 20) said stereoscopic viewing method comprising: a region

extraction step of extracting left and right regions which do not include fused points corresponding to each other in the left image and the right image; (Wood, Figs. 2 & 3 Elements G and G', Column 3 Line 57 – column 4 Line 40 [G and G' are locations within the image which do not include pairs of fused points between the left and right image.]) and a region processing step of carrying out processing of generating the stereoscopic image set of images so as to make the processed regions extracted in the region extraction step even more inconspicuous than the remaining regions of the regions. (Wood, Column 4 Lines 3 – 41 [Wood teaches post-processing using nearest occluded pixel information, a z-buffer for the nearest visible pixels and for the nearest occluded pixels, to fill in the gaps so as to make the processed region less noticeable, more inconspicuous. Furthermore, the Examiner asserts that Wood teaches processing only one of the left and right target regions to make the regions more unobtrusive, i.e. inconspicuous.]) Wood fails to teach a region extraction step of extracting left and right regions which are displayed on a display plane. Pertaining to analogous art, Blake et al. teach a region extraction step of extracting left and right regions which are displayed on a display plane. (Blake et al. Figs. 6 & 7, Page 2 Paragraphs 0025 – 0026 and Page 3 Paragraphs 0035 – 0041) It would have been obvious to one of ordinary skill in the art at the time of the invention to

modify the teachings of Wood with the teachings of Blake et al. This modification would have been prompted in order to provide a user with information regarding which picture elements are processed picture elements as opposed to original picture elements. This combination could have been completed using well known techniques and would likely yield predictable results, in that the regions extracted by Wood that fail to have a pair of fused points between a left and right image, and therefor require post-processing, would be displayed to a user.

- With regards to claim 21, Wood teaches a apparatus for generating a stereoscopic image set of images having a left image and a right image for stereoscopic vision, (Wood, Fig. 1, Abstract, Column 2 Line 58 - Column 3 Line 20) said apparatus comprising: a region extraction means of extracting left and right regions which do not include fused points corresponding to each other in the left image and the right image; (Wood, Figs. 2 & 3 Elements G and G', Column 3 Line 57 – column 4 Line 40 [G and G' are locations within the image which do not include pairs of fused points between the left and right image.]) and a region processing means of carrying out processing of generating the stereoscopic image set of images so as to make the regions extracted in the region extraction step even more inconspicuous than the remaining regions of the

regions. (Wood, Column 4 Lines 3 – 41 [Wood teaches post-processing using nearest occluded pixel information, a z-buffer for the nearest visible pixels and for the nearest occluded pixels, to fill in the gaps so as to make the processed region less noticeable, more inconspicuous. Furthermore, the Examiner asserts that Wood teaches processing only one of the left and right target regions to make the regions more unobtrusive, i.e. inconspicuous.]) Wood fails to teach a region extraction means of extracting left and right regions which are displayed on a display plane. Pertaining to analogous art, Blake et al. teach a region extraction means of extracting left and right regions which are displayed on a display plane. (Blake et al. Figs. 6 & 7, Page 2 Paragraphs 0025 – 0026 and Page 3 Paragraphs 0035 – 0041) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Wood with the teachings of Blake et al. This modification would have been prompted in order to provide a user with information regarding which picture elements are processed picture elements as opposed to original picture elements. This combination could have been completed using well known techniques and would likely yield predictable results, in that the regions extracted by Wood that fail to have a pair of fused points between a left and right image, and therefor require post-processing, would be displayed to a user.

- With regards to claim 23, Wood teaches a computer readable medium storing a program for controlling an apparatus for generating a stereoscopic image set of images having a left image and a right image for stereoscopic vision, (Wood, Column 4 Line 62 - Column 5 Line 41) said program causing said stereoscopic image generating apparatus to execute: a region extraction step of extracting left and right regions which do not include fused points corresponding to each other in the left image and the right image; (Wood, Figs. 2 & 3 Elements G and G', Column 3 Line 57 – column 4 Line 40 [G and G' are locations within the image which do not include pairs of fused points between the left and right image.]) and a region processing step of carrying out processing of generating the stereoscopic image set of images so as to make the regions extracted in the region extraction step even more inconspicuous than the remaining regions of the regions. (Wood, Column 4 Lines 3 – 41 [Wood teaches post-processing using nearest occluded pixel information, a z-buffer for the nearest visible pixels and for the nearest occluded pixels, to fill in the gaps so as to make the processed region less noticeable, more inconspicuous. Furthermore, the Examiner asserts that Wood teaches processing only one of the left and right target regions to make the regions more unobtrusive, i.e. inconspicuous.]) Wood fails to teach a region

extraction step of extracting left and right regions which are displayed on a display plane. Pertaining to analogous art, Blake et al. teach a region extraction step of extracting left and right regions which are displayed on a display plane. (Blake et al. Figs. 6 & 7, Page 2 Paragraphs 0025 – 0026 and Page 3 Paragraphs 0035 – 0041) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Wood with the teachings of Blake et al. This modification would have been prompted in order to provide a user with information regarding which picture elements are processed picture elements as opposed to original picture elements. This combination could have been completed using well known techniques and would likely yield predictable results, in that the regions extracted by Wood that fail to have a pair of fused points between a left and right image, and therefor require post-processing, would be displayed to a user.

9. Claims 4, 6, 8, 10, 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wood U.S. Patent No. 6,0234,263 in view of Morimura et al. U.S. Patent No. 6,215,899 as applied to claim 1 above, and further in view of Blake et al. U.S. Publication No. 2005/0232510 A1.

- With regards to claim 4, Wood in view of Morimura et al. teach the method as claimed in claim 1. Wood fails to teach wherein the

processing of generating the stereoscopic image set of images is a processing of blurring the region identified in the region extraction step. Pertaining to analogous art, Blake et al. teach wherein the processing of generating the stereoscopic image set of images is a processing of blurring the region identified in the region extraction step. (Blake et al., Page 3 Paragraphs 0039 – 0041, [a low-pass smoothing operation is performed on the disparity patch which induces blur]) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined teachings of Wood in view of Morimura et al. with the teachings of Blake et al. This modification would have been prompted in order to save memory by no longer needing to store the z-buffered information as used by Wood for making the removed region more inconspicuous. This combination could have been completed using well known techniques and would likely yield predictable results, in that z-buffer information would no longer need to be stored for making the processed regions more inconspicuous.

- With regards to claim 6, Wood in view of Morimura et al. teach the method as claimed in claim 1. Wood fails to teach wherein the processing of generating the stereoscopic image set of images is a processing of reducing contrast of the region identified in the region extraction step. Pertaining to analogous art, Blake et al. teach

wherein the processing of generating the stereoscopic image set of images is a processing of reducing contrast of the region identified in the region extraction step. (Blake et al., Page 3 Paragraphs 0039 – 0041, [a low-pass smoothing operation is performed on the disparity patch which would induce a contrast reduction]) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined teachings of Wood in view of Morimura et al. with the teachings of Blake et al. This modification would have been prompted in order to save memory by no longer needing to store the z-buffered information as used by Wood for making the removed region more inconspicuous. This combination could have been completed using well known techniques and would likely yield predictable results, in that z-buffer information would no longer need to be stored for making the processed regions more inconspicuous.

- With regards to claim 8, Wood in view of Morimura et al. teach the method as claimed in claim 1. Wood fails to teach wherein the processing of generating the stereoscopic image set of images is a processing of reducing saturation or brightness of the region identified in the region extraction step. Pertaining to analogous art, Blake et al. teach wherein the processing of generating the stereoscopic image set of images is a processing of reducing

saturation or brightness of the region identified in the region extraction step. (Blake et al., Page 4 Paragraph 0053 – Page 5 Paragraph 0058) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined teachings of Wood in view of Morimura et al. with the teachings of Blake et al. This modification would have been prompted in order to save memory by no longer needing to store the z-buffered information as used by Wood for making the removed region more inconspicuous. This combination could have been completed using well known techniques and would likely yield predictable results, in that z-buffer information would no longer need to be stored for making the processed regions more inconspicuous.

- With regards to claim 10, Wood in view of Morimura et al. teach the generating method as claimed in claim 1. Wood fails to teach wherein the processing of generating the stereoscopic image set of images is processing of bringing a hue of the region identified in the region extraction step to a cold color family. (Blake et al., Page 4 Paragraph 0053 – Page 5 Paragraph 0058, the process alters the color of the inconspicuous region bringing the hue to any color family, which includes cold colors) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined teachings of Wood in view of Morimura et al. with the

teachings of Blake et al. This modification would have been prompted in order to save memory by no longer needing to store the z-buffered information as used by Wood for making the removed region more inconspicuous. This combination could have been completed using well known techniques and would likely yield predictable results, in that z-buffer information would no longer need to be stored for making the processed regions more inconspicuous.

- With regards to claim 12, Wood in view of Morimura et al. teach the method as claimed in claim 1. Wood fails to teach wherein the processing of generating the stereoscopic image set of images is a processing of bringing a hue, saturation or brightness of the region identified in the region extraction step close to a hue, saturation or brightness of the remaining regions of the target regions. Pertaining to analogous art, Blake et al. teach wherein the processing of generating the stereoscopic image set of images is a processing of bringing a hue, saturation or brightness of the region identified in the region extraction step close to a hue, saturation or brightness of the remaining regions of the target regions. (Blake et al., Page 4 Paragraph 0053 – Page 5 Paragraph 0058) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify combined the teachings of Wood in view of Morimura et

al. with the teachings of Blake et al. This modification would have been prompted in order to save memory by no longer needing to store the z-buffered information as used by Wood for making the removed region more inconspicuous. This combination could have been completed using well known techniques and would likely yield predictable results, in that z-buffer information would no longer need to be stored for making the processed regions more inconspicuous.

- With regards to claim 14, Wood in view of Morimura et al. teach the method as claimed in claim 1. Wood fails to teach wherein the processing of generating a stereoscopic image set of images so as to make more inconspicuous is one of or a combination of the following processings: (1) processing of blurring the region; (2) processing of reducing contrast of the region identified in the region extraction step; (3) processing of reducing saturation or brightness of the region identified in the region extraction step; (4) processing of bringing a hue of the region identified in the region extraction step close to a cold color family; and (5) processing of bringing a hue, saturation or brightness of the region identified in the region extraction step close to a hue, saturation or brightness of remaining regions of the target regions. Pertaining to analogous art, Blake et al. teach wherein the processing of generating a stereoscopic

image set of images so as to make more inconspicuous is one of or a combination of the following processings: (1) processing of blurring the region; (2) processing of reducing contrast of the region identified in the region extraction step; (3) processing of reducing saturation or brightness of the region identified in the region extraction step; (4) processing of bringing a hue of the region identified in the region extraction step close to a cold color family; and (5) processing of bringing a hue, saturation or brightness of the region identified in the region extraction step close to a hue, saturation or brightness of remaining regions of the target regions. (Blake et al., Page 3 Paragraphs 0039 – 0041 and Page 4 Paragraph 0053 – Page 5 Paragraph 0058) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined teachings of Wood in view of Morimura et al. with the teachings of Blake et al. This modification would have been prompted in order to save memory by no longer needing to store the z-buffered information as used by Wood for making the removed region more inconspicuous. This combination could have been completed using well known techniques and would likely yield predictable results, in that z-buffer information would no longer need to be stored for making the processed regions more inconspicuous.

10. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wood U.S. Patent No. 6,023,263 in view of Morimura et al. U.S. Patent No. 6,215,899 and further in view of Tabata U.S. Patent No. 6,449,309.

- With regards to claim 24, Wood teaches a method for generating a stereoscopic image set of images which has a left image and a right image for stereoscopic vision, and forms a virtual stereoscopic image by vergence angles generated from individual points corresponding in the left image and the right image by a stereoscopic image generating apparatus, (Wood, Fig. 1, Abstract, Column 2 Line 58 – Column 3 Line 20) said method comprising: a region extraction step of extracting left and right target regions which do not include a pair of fused points corresponding to each other in the left image and the right image; (Wood, Figs. 2 & 3 Elements G and G', Column 3 Line 57 – column 4 Line 40 [G and G' are locations within the image which do not include pairs of fused points between the left and right image.]) and a region processing step of carrying out processing of generating the stereoscopic image set of images so as to make the region identified in the region extraction step even more inconspicuous than the remaining regions of the target regions. (Wood, Column 4 Lines 3 – 41 [Wood teaches post-processing using nearest occluded pixel information, a z-buffer for the nearest visible pixels

and for the nearest occluded pixels, to fill in the gaps so as to make the processed region less noticeable, more inconspicuous. Furthermore, the Examiner asserts that Wood teaches processing only one of the left and right target regions to make the regions more inconspicuous.]) Wood teaches identifying a gap in one of the left or right images (taken to be the more inconspicuous region since nothing is present as opposed to something) and processing the gap so that it becomes unobtrusive, i.e. more inconspicuous. (Wood, Column 4 Lines 3 – 40 [The nearest occluded pixel information is substituted to fill the gaps so they are highly correlated to the remainder of the image.]) However, Wood fails to explicitly teach identifying a more inconspicuous region between the left and right target regions; and a vergence angle modifying step of increasing a stereoscopic effect by carrying out deformation processing of a left image and a right image of a stereoscopic image set of images which are prepared in advance to form the virtual stereoscopic image, by increasing or decreasing the vergence angles generated by the individual points of the stereoscopic image set of images according to a prescribed rule, and by altering a depth of the virtual stereoscopic image. Pertaining to analogous art, Morimura et al. teach identifying a more inconspicuous region between the left and right target regions. (Morimura et al., Column 19 Lines 22 – 51 and Column 20 Lines 22

- 55) Morimura et al. fail to teach a vergence angle modifying step of increasing a stereoscopic effect by carrying out deformation processing of a left image and a right image of a stereoscopic image set of images which are prepared in advance to form the virtual stereoscopic image, by increasing or decreasing the vergence angles generated by the individual points of the stereoscopic image set of images according to a prescribed rule, and by altering a depth of the virtual stereoscopic image. Pertaining to analogous art, Tabata teaches a vergence angle modifying step of increasing a stereoscopic effect by carrying out deformation processing of a left image and a right image of a stereoscopic image set of images which are prepared in advance to form the virtual stereoscopic image, by increasing or decreasing the vergence angles generated by the individual points of the stereoscopic image set of images according to a prescribed rule, and by altering a depth of the virtual stereoscopic image. (Tabata, Figs. 4 – 6 & 9 – 12, Column 1 Line 56 – Column 2 Line 15, Column 13 Line 45 – Column 14 Line 11) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Wood to include the teachings of Morimura et al. This modification would have been prompted in order to improve the base device of Wood with the teachings of Morimura et al. The teachings of Morimura et al. to identify the

region which is in need of processing would enhance the base device of Wood in the same way it improves the device of Morimura et al. in that the region requiring processing to improve the synthetic image would only be applied to the recognized one region in one image exemplifying occluded data. This combination could be completed according to well known techniques in the art and would likely yield predictable results, in that the inconspicuous region would be identified and processed in one image thereby enhancing the regions in both images of Wood. Furthermore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined teaches of Wood in view of Morimura et al. with the teachings of Tabata. This modification would have been prompted in order to minimize occlusions and artifacts produced in the stereographic image. The combination would enhance the base device of Wood in the same way the teachings of Tabata enhance their stereoscopic device. The combination could be completed according to well known techniques and would likely yield predictable results, in that the enhancement of Tabata would reduce the number of occlusions and artifacts produced in the image set of images and therefor reduce the need for extensive post-processing procedures to combat binocular rivalry between left and right images.

11. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wood U.S. Patent No. 6,023,263 in view of Blake et al. U.S. Publication No. 2005/0232510 A1 and further in view of Tabata U.S. Patent No. 6,449,309.

- With regards to claim 25, Wood teaches a method for generating a stereoscopic image set of images which has a left image and a right image for stereoscopic vision, and forms a virtual stereoscopic image by vergence angles generated from individual points corresponding in the left image and the right image by a stereoscopic image generating apparatus, (Wood, Fig. 1, Abstract, Column 2 Line 58 – Column 3 Line 20) said method comprising: a region extraction step of extracting left and right regions which do not include fused points corresponding to each other in the left image and the right image; (Wood, Figs. 2 & 3 Elements G and G', Column 3 Line 57 – column 4 Line 40 [G and G' are locations within the image which do not include pairs of fused points between the left and right image.]) and a region processing step of carrying out processing of generating the stereoscopic image set of images so as to make the regions extracted in the region extraction step even more inconspicuous than the remaining regions of the regions. (Wood, Column 4 Lines 3 – 41 [Wood teaches post-processing using nearest occluded pixel information, a z-buffer for the nearest visible pixels and for the nearest occluded pixels, to fill in the gaps

so as to make the processed region less noticeable, more inconspicuous. Furthermore, the Examiner asserts that Wood teaches processing only one of the left and right target regions to make the regions more inconspicuous.]) Wood fails to teach a region extraction step of extracting left and right regions which are displayed on a display plane; and a vergence angle modifying step of increasing a stereoscopic effect by carrying out deformation processing of a left image and a right image of a stereoscopic image which are prepared in advance to form the virtual stereoscopic image, by increasing or decreasing the vergence angles generated by the individual points of the stereoscopic image set of images according to a prescribed rule, and by altering a depth of the virtual stereoscopic image. Pertaining to analogous art, Blake et al. teach a region extraction means of extracting left and right regions which are displayed on a display plane. (Blake et al. Figs. 6 & 7, Page 2 Paragraphs 0025 – 0026 and Page 3 Paragraphs 0035 – 0041) Blake et al. fail to teach a vergence angle modifying step of increasing a stereoscopic effect by carrying out deformation processing of a left image and a right image of a stereoscopic image which are prepared in advance to form the virtual stereoscopic image, by increasing or decreasing the vergence angles generated by the individual points of the stereoscopic image set of images according to a prescribed rule,

and by altering a depth of the virtual stereoscopic image. Pertaining to analogous art, Tabata teaches a vergence angle modifying step of increasing a stereoscopic effect by carrying out deformation processing of a left image and a right image of a stereoscopic image which are prepared in advance to form the virtual stereoscopic image, by increasing or decreasing the vergence angles generated by the individual points of the stereoscopic image set of images according to a prescribed rule, and by altering a depth of the virtual stereoscopic image. (Tabata, Figs. 4 – 6 & 9 – 12, Column 1 Line 56 – Column 2 Line 15, Column 13 Line 45 – Column 14 Line 11) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Wood with the teachings of Blake et al. This modification would have been prompted in order to provide a user with information regarding which picture elements are processed picture elements as opposed to original picture elements. This combination could have been completed using well known techniques and would likely yield predictable results, in that the regions extracted by Wood that fail to have a pair of fused points between a left and right image, and therefor require post-processing, would be displayed to a user. Furthermore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined teaches of Wood in view of Blake et al. with the teachings of Tabata. This

modification would have been prompted in order to minimize occlusions and artifacts produced in the stereographic image. The combination would enhance the base device of Wood in the same way the teachings of Tabata enhance their stereoscopic device. The combination could be completed according to well known techniques and would likely yield predictable results, in that the enhancement of Tabata would reduce the number of occlusions and artifacts produced in the image set of images and therefor reduce the need for extensive post-processing procedures to combat binocular rivalry between left and right images.

Response to Arguments

12. Applicant's arguments with respect to claims 1, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24 and 25 have been considered but are moot in view of the new ground(s) of rejection.

13. Applicant's arguments filed 26 March 2010 have been fully considered but they are not persuasive.

a. On page 14 of the remarks filed 26 March 2010 the Applicant's Representative argues that Wood the “filled gaps” may be accidentally or consequently unobtrusive but Wood never discloses that the gaps should be or are directed to being made unobtrusive and that Wood never discloses making a portion or region included in an image set more inconspicuous. The Examiner respectfully disagrees. The Examiner

asserts that Wood teaches that “The nearest occluded pixel information typically corresponds to the actual scene content, so the filled gaps are highly correlated to the remained of the image and as such are unobtrusive.", see column 4 lines 37 - 41. The Examiner asserts that the gaps correspond to a region not including a pair of fused points between a left and right image and the gaps are inconspicuous regions but are made more inconspicuous by the process of filling the gaps with the nearest occluded pixel information.

b. On pages 14 – 15 of the remarks filed 26 March 2010 the Applicant’s Representative argues that Wood neither discloses nor suggests that their teachings are directed to binocular rivalry. The Examiner respectfully disagrees. First, the Examiner asserts that “Binocular rivalry” is not found nor is present in the instant claims. Second, the Examiner asserts that Wood is directed to combating binocular rivalry because Wood is directed towards overcoming the defect associated with stereoscopic image sets when an object is present in one of a left or right image and occluded in the other of the left or right image, see at least figs. 2 & 3 and column 2 line 58 - column 3 line 30.

c. On Page 15 of the remarks filed 26 March 2010 the Applicant’s Representative argues that the claims do not recite “the image may be unobtrusive to the user” and that the present claims makes the target region that is not created in post-processing more inconspicuous. The Examiner respectfully disagrees. The Examiner asserts that although the

claims do not recite “the image may be unobtrusive to the user” the claims do recited making a region more inconspicuous and asserts that unobtrusive is a synonym for inconspicuous. The Examiner also asserts that Wood teaches processing one of the left and right target regions to make the regions unobtrusive, more inconspicuous.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERIC RUSH whose telephone number is (571)270-3017. The examiner can normally be reached on 7:30AM - 5:00PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Matthew Bella can be reached on (571) 272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew C Bella/
Supervisory Patent Examiner, Art Unit 2624

/E. R./
Examiner, Art Unit 2624